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May 22, 2018

# **ELECTRONIC BIOMETRIC TRANSMISSION**

## **SPECIFICATION (EBTS)**

### **TECHNICAL AND OPERATIONAL UPDATE (TOU)**

#### **10.0.9 REDLINES**

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|--|------------|
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**SECTION 1 – MESSAGE TO CJIS SYSTEMS OFFICERS, STATE IDENTIFICATION BUREAUS, AND OTHER INTERFACE AGENCIES**

Technical and Operational Updates (TOUs) document functional changes to the Electronic Biometric Transmission Specification (EBTS) as an interim solution (until the release of the next major version) to enable FBI/CJIS system user compliance. The purpose of this document is to identify TOU 9 changes with redlines for user clarity. This and all previous TOUs are documented within the full text of the EBTS version 10.0.9, identified through configuration management number NGI-DOC-01862-1.2.

Please note that the functional changes documented by this TOU are cumulative such that user compliance requires adherence to the most recent version of the EBTS and incorporation of all functional changes documented by this and all prior TOUs since the release of the most recent major version of the EBTS. A comprehensive list of all TOU functional changes since the release of the most recent major version of the EBTS is located in Section 3 and sorted by section.

\* \* \* \* \*

Users are reminded that any questions concerning the distribution of EBTS TOUs should be directed to the Programs Research and Standards Unit.

Archived and Active versions of the EBTS and its TOUs are available via the Internet on the FBI Biospecs Web site at <<http://www.fbibiospecs.cjis.gov>>.

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**SECTION 2 – FUNCTIONAL CHANGES FOR 10.0.9**

Section 2 contains information concerning the modifications constituting EBTS 10.0.9. The following table is an overview of the functional modifications for this TOU version.

| Section  | Change   |
|--|--|
| <b>Throughout</b>  | Grammar, punctuation, and minor style updates  |
| <b>3.1.1</b>   | Removed MAPC TOT from EBTS   |
| <b>3.1.1.15 MAPC</b>   | Removed MAPC TOT from EBTS   |
| <b>3.5.3 RBRN</b>  | Updated RBRN description   |
| <b>3.6.20 RBSCVL</b>   | Updated RBSCVL description   |
| <b>3.6.20 RBSCVL</b>   | Removed Rap Back Code value “F” from Rap Back Civil Category Code Values Table             |
| <b>3.6.22 RBMNT</b>  | Updated Rap Back Replace & Renew descriptions  |
| <b>3.8.4</b>   | Corrected plain thumb sizes in Recommended Sizes for Fingerprint Table                     |
| <b>Appendix A</b>  | Removed second paragraph   |
|  | Removed MAPC from Table A-2  |
| <b>Appendix C</b>  | Removed 2.094 CCN from EBTS  |
|  | Removed Future Capability reference for 2.2018 DNAC and updated description                |
|  | Removed Rap Back Code value “F” from RBC Values Table                                      |
|  | Updated Rap Back Code “N” in RBMI Values Table   |
|  | Updated 2.2071 RBST description and removed RBST Values Table                              |
|  | Updated description for 2.2049 RBTD  |
|  | Removed 2.099 SAN from EBTS  |
|  | Removed 2.2001 NAM1, 2.2002 NAM2, 2.2003 NAM3, 2.2004 NAM4 and 2.2005 NAM5 from EBTS       |
|  | Added 2.2018 DNAC to Table C-1   |
| Updated Comments/Special Characters in Table C-1 for 2.2039 RBMI and 2.2049 RBTD |  |
| <b>Appendix D</b>  | Added 2.2018 SRE in Table D-1  |
| <b>Appendix I</b>  | Updated 2.2071 RBST for RBSCVL in Table I-1  |
| <b>Appendix L</b>  | Added missing fields to Table L-1  |
|  | Removed 2.094 CCN and 2.099 SAN from Table L-1   |
|  | Removed 2.2001 NAM1, 2.2002 NAM2, 2.2003 NAM3, 2.2004 NAM4, and 2.2005 NAM5 from Table L-1 |
| <b>Appendix M</b>  | Added error message code L0032   |
|  | Added new error message codes L0042, L0176, L0181, L0182, M0056, and M0057                 |
| <b>Appendix N</b>  | Added field 14.025 ASEG to Appendix N  |

## 1.2 File Format

*[Unchanged text not included here for brevity]*

For other Record Types, the default character encoding for Traditional encoding is 7-bit ASCII. Users are encouraged to use UTF-8 for ‘U’ and ‘user-defined’ character types that do not require special control characters in Traditional Encoding. It is not possible to switch encodings within an XML transaction. **For more information on ASCII characters, see Appendix C.**

*[Unchanged text not included here for brevity]*

## 1.4 Error Handling

*[Unchanged text not included here for brevity]*

The EBTS Compliance Tool Suite, consisting of the Transaction and Reference Tools, is helpful to use before submitting a transaction to identify and resolve potential errors before transactions are rejected. The Transaction Tool allows users to validate transactions by displaying if a transaction is invalid or valid according to EBTS requirements. If invalid, the tool displays missing and incorrect fields. The Reference Tool provides users with the ability to easily view transaction, record, and field requirements in the EBTS specification. Both tools can be found at [www.fbibiospecs.cjis.gov/EBTS/Approved](http://www.fbibiospecs.cjis.gov/EBTS/Approved).

*[Unchanged text not included here for brevity]*

## 1.8 Reference Documents

*[Unchanged text not included here for brevity]*

- **Contact [Rap\\_Back@ic.fbi.gov](mailto:Rap_Back@ic.fbi.gov) for information about obtaining the latest version of the Rap Back Policy and Implementation Guide**

### 3.1.1 Tenprint Fingerprint Identification Submission

*[Unchanged text not included here for brevity]*

#### TOT TRANSACTION

NFUE Non-Federal User Fee Expedite

NFUF Non-Federal Applicant User Fee

MAP Miscellaneous Applicant Civil

~~MAPC Miscellaneous Applicant Civil (Manual Out)~~

DEK Known Deceased

DEU Unknown Deceased

MPR Missing Person

AMN Amnesia Victim

*[Unchanged text not included here for brevity]*

#### 3.1.1.15 Miscellaneous Applicant Civil (Manual Out) (MAPC) – **Deprecated on 5/22/18 TOU 9**

~~These no-charge submissions are used for non-federal law enforcement and criminal justice employment (including state and local law enforcement), as well as gun permit applications from criminal justice agencies. A submission contains ten-rolled and four plain impressions, or three identification flat impressions, along with biographic descriptor data. When the FBI/CJIS completes processing, it will print a non-identification, positive identification, or Reject response report and mail it to the requestor.~~

~~Note: MAPC is a limited-use TOT that requires coordination with FBI/CJIS prior to use.~~

### **3.1.1.20 Rap Back Subscription Requests**

The NGI's Rap Back Service was developed in response to a need for notification of activity that occurs after the initial processing and retention of fingerprint transactions. The NGI's Rap Back Service provides benefits in two domains of implementation: (a) for non-criminal justice applicants, employees, volunteers, licensees, etc, and (b) for individuals under criminal justice supervision or criminal investigation. A Rap Back Subscription is established by either a retained Tenprint Identification Search request or a Subsequent Subscription request. **Subscribers are encouraged to consult the Rap Back Service Policy and Implementation Guide for additional information.**

*[Unchanged text not included here for brevity]*

### **3.4.4.2 Text-Based Photo/SMT Search Request (TXTSRCH)**

This transaction will allow the user to specify demographic data along with Scar, Mark, and Tattoo (SMT) descriptive data to be used in a search for investigative leads and return facial or SMT photos, based on the Image Type (2.062 IMT) and descriptive parameters specified in the request. The TXTSRCH transaction is typically used to generate photo lineups of criminal subjects that have physical characteristics (~~i.e., skin tone~~, e.g., hair color, eye color, sex, SMT specific characteristics, etc.) similar to a criminal suspect. To search for facial images, the IMT (2.062) field must be set to '9' and the sought for image should be described using one or more of the biographic descriptive fields. Each descriptor will be added to the required match parameters, therefore adding multiple descriptors may return few or no candidates.

*[Unchanged text not included here for brevity]*

### **3.5.3 Rap Back Renewal Notification (RBRN)**

The FBI/CJIS will send a Rap Back Renewal Notification to the Rap Back Subscription Owner **10 days** prior to the designated expiration date for each Rap Back Subscription, advising of the upcoming expiration of their Rap Back Subscription. The Rap Back Subscription Owner has the ability to extend the expiration date to a new date ~~within the existing Rap Back Subscription Term or to renew the Rap Back Subscription Term by sending a Rap Back Maintenance Request~~. The Rap Back Renewal Notification will include key Rap Back Subscription data in addition to the expiration date.

### **3.6.11 Disposition File Maintenance Submission **Request** (DSPE)**

The Disposition File Maintenance Submission **Request** (DSPE) allows an authorized contributor to add, to replace, append, or delete disposition data on an existing arrest event. The Event Identifier (2.2035 EVI) or Date of Arrest (2.045 DOA) field is used to associate the disposition information with an existing arrest event. Either EVI or DOA must be populated. EVI is preferred, as DOA may not be unique for a subject arrested multiple times in a single day.

### 3.6.12 Disposition File Maintenance Response (DSPR)

The Disposition File Maintenance Response (DSPR) will be sent back to the requestor and indicates whether the transaction was processed as submitted. The response information will be “Record Updated” if the record was successfully updated with the submitted Court Segment Literal (2.051 CSL) ~~or “Manual Processing Required” if subsequent analysis of the submitted CSL is necessary.~~ The response information will be contained in the Action to be Taken field (2.071 ACN). Reject responses for DSPE requests where the supplied disposition information was unable to be applied to the identity will be via the ERRA TOT.

### 3.6.20 Rap Back Subsequent Subscription Request – Civil (RBSCVL)

Any authorized agency may establish a Civil Rap Back Subscription by submitting a civil UCN (2.014 FBI) and either a full Tenprint Fingerprint image set or an Event Identifier (2.2035 EVI) from a previously submitted Civil Tenprint Fingerprint Identification Search. A Subscription also requires the Name (2.018 NAM), Date of Birth (2.022 DOB) of the Subscription subject, ~~the Rap Back Subscription Term (2.2074 RBST),~~ and the Subscription Rap Back Category (2.2065 RBC). Allowable Civil Rap Back Categories are as follows:

**Table 6 Rap Back Civil Category Code Values**

| Rap Back Code Value | Rap Back Category Code Description   |
|---------------------|--|
| F                   | Firearms   |
| I                   | Volunteer, Child Care/School Employee, Non-Criminal Justice Employee and Licensing |
| J                   | Criminal Justice Employee  |
| S                   | Security Clearance Information Act (SCIA)  |

~~The Civil Rap Back Subscription Term may be two years, five years, or lifetime.~~ All subscriptions require the Rap Back Expiration Date (2.2015 RBXD) to be set, in order to establish the Subscription validation period.

Note: RBSCVL is a limited-use TOT that requires coordination with FBI/CJIS prior to use.

### 3.6.22 Rap Back Maintenance ~~Submission Request~~ (RBMNT)

The Rap Back Maintenance ~~Submission Request~~ (RBMNT) provides the opportunity for a Rap Back Subscription Owner to modify, renew, or delete their Rap Back Subscription record information. Both the FBI Number/UCN (2.014 FBI) and Rap Back Subscription Identifier (2.2048 RBSI) are required. Rap Back Maintenance can be performed on expired or cancelled Subscriptions for a configurable time period (60 days) after the expiration date or cancellation date.

*[Unchanged text not included here for brevity]*

The type of Rap Back Maintenance the Rap Back Subscription Owner wishes to perform is signified by the Rap Back Maintenance Indicator (2.2039 RBMI), which supports the following maintenance actions: Replace, Delete, Append, Cancel, **Renew**, and Un-cancel.

#### Replace

The matching Rap Back Subscription will be updated with Rap Back Subscription Data provided in the request. The data fields that can be replaced are: Name (2.018 NAM), Date of Birth (2.022

DOB), Rap Back Activity Notification Format (2.2062 RBNF), Rap Back Opt-Out In State Indicator (2.2063 RBOO), Rap Back Attention Indicator (2.2070 RBATN), Rap Back Expiration Date (2.2015 RBXD), Rap Back Trigger (2.2040 RBT), Rap Back Recipient (2.2020 RBR), Rap Back Disclosure Indicator (2.2067 RBDI), and Rap Back User-Defined (2.2064 RBUD). ~~Rap Back subscriptions with a non-lifetime term must ensure that the replaced expiration date is on or prior to the Rap Back Term Date.~~

*[Unchanged text not included here for brevity]*

**Renew (Currently Not Used)**

Renew is only applicable for Rap Back Subscriptions with a “Civil” Rap Back Category (2.2065 RBC) and a non-lifetime term; the matching Rap Back Subscription will be renewed for another term equal to the original term. ~~As there are currently no fees associated with the Rap Back Services, the renew maintenance indicator is not being used at this time. A Subscription with a lifetime term must use the “Replace” maintenance indicator to extend the expiration date.~~

~~The Rap Back fields needed to renew a Subscription are the FBI Number/UCN (2.014 FBI), Rap Back Subscription Identifier (2.2048 RBSI), and Expiration Date (2.2015 RBXD). The expiration date must be on or prior to the new Rap Back Term Date (2.2049 RBTD) and is used by the Subscriber for validation purposes.~~

*[Unchanged text not included here for brevity]*

**3.8.4 Fingerprint Image Size Requirements**

*[Unchanged text not included here for brevity]*

**Table 8 Recommended Sizes for Fingerprint**

| Fingerprint                          | Width Pixels (Inches) | Height Pixels (Inches)             |
|--------------------------------------|-----------------------|------------------------------------|
| Plain Thumb Impression (@ 500 ppi)   | 500 (1.0)             | <del>1,500 (3.0)</del> 1,000 (2.0) |
| Plain Thumb Impression (@ 1,000 ppi) | 1,000 (1.0)           | <del>3,000 (3.0)</del> 2,000 (2.0) |

**Appendix A: Transaction Response Times**

Table A-1 represents maximum response times for incoming electronic transactions. NGI transaction response times listed are from receipt of transaction until transmission of response.

NGI is not responsible for transaction processing or transmission times by external systems.

Table A-2 represents types of transactions by service. The 1.006 PRY field (see definition of PRY in American National Standards Institute/National Institute of Standards and Technology - Information Technology Laboratory (ANSI/NIST-ITL) corresponds to the Priority column in Table A-1 for transactions which will process based on priority, and this field will be used to prioritize all transaction types, including investigative. PRY is not applicable to transaction types with no values in the priority column of table A-1.

~~Each agency will be allocated a maximum number of high priority transactions per transaction type per day. Once this limit is reached, high priority transactions will continue to be processed,~~

but their priority level will be adjusted to “routine”.

**Table A-2 NGI Type of Transaction By Service**

| SERVICE                 | TRANSACTION                             | TOT             | DESCRIPTION   |
|-------------------------|---|-----------------|---|
| Identification Services | Civil Fingerprint Identification Search | AMN             | Amnesia Victim  |
|                         |   | DEK             | Known Deceased  |
|                         |   | DEU             | Unknown Deceased                                      |
|                         |   | DOCE            | Departmental Order Channeling Electronic              |
|                         |   | EMUF            | Electronic In/Manual Out User Fee Submissions         |
|                         |   | FANC            | Federal Applicant (No Charge)                         |
|                         |   | FAUF            | Federal Applicant User Fee                            |
|                         |   | FNDR            | Federal No Charge Direct Route                        |
|                         |   | MAP             | Miscellaneous Applicant Civil                         |
|                         |   | <del>MAPC</del> | <del>Miscellaneous Applicant Civil (Manual Out)</del> |
|                         |   | MPR             | Missing Person  |
|                         |   | NFUE            | Non-Federal User Fee Expedite                         |
|                         |   | NFUF            | Non-Federal Applicant User Fee                        |
| NNDR                    | Non-Federal No Charge                   |                 |   |

## Appendix C: Descriptors and Field Edit Specifications for Type-2 Logical Records

### 1.0 User-Defined Data

Table C-1 summarizes the content of each of the fields in the Type-2 record in the traditional encoding format. The field sizes do not account for any separator characters. Some Type-2 elements have their origins as contributor-supplied data. User-defined data is that subset of contributor-supplied data that will not be stored in any CJIS files for later search or retrieval purposes. User-defined data will not be validated (with several exceptions), and therefore may in general consist of any printable 7-bit ASCII character: (i.e., free-text). This includes ASCII (decimal) codes 07 (BEL) through 13 (CR) and 32 (SP) through 127 (DEL), inclusive. Separator characters are not part of the printable character set. **The 7-bit ASCII characters used in NGI elements include the alphabet [upper case (capital letter) and lower case (small letter)], numbers 0 through 9, special characters, and nonprintable characters. Nonprintable characters are defined as codes 07 through 13. For additional information, reference 7-Bit ASCII guidance in ANSI/NIST-ITL 1-2011.**

*[Unchanged text not included here for brevity]*

**CAN 2.064 Candidate List**

*[Unchanged text not included here for brevity]*

For traditional encoding, each field will be separated by a {US} separator and will be provided for each candidate in the list. Commas, hyphens, and spaces are allowed in the NAM subfield as specified in the ~~NCIC Message Book, Part 4 Personal Descriptors within the NCIC Code Manual~~. Each UCN and NAM set shall be separated from the next by the {RS} separator character.

*[Unchanged text not included here for brevity]*

**~~CCN 2.094 Court Case Number (Future Capability)~~**

~~This is a unique number assigned by the state or federal court system to identify a specific court event occurrence in a subject identity history record. The CCN is an optional element that may assist in matching the submitted disposition data to the correct court cycle. If present in the submission, this field should be returned in the response. Any printable 7-bit ASCII character with the exception of a period is acceptable. Embedded spaces are not permitted. A CCN must not begin with a space.~~

**CSL 2.051 Court Segment Literal**

*[Unchanged text not included here for brevity]*

Up to 999 occurrences of the CSL are allowed. Each occurrence in the traditional encoding of the CSL shall be separated by the {RS} separator character. Of the five available subfields, COL, CPL, and CDN are always mandatory, while the CDD and CCT are conditional (being required with TOTs ~~FSDP~~ ~~FDSP~~ and DSPE). A CDD (if available), followed by a COL, followed by a CPL, followed by a CDN, followed by CCT (if available), each separated by a {US} separator character must be present for each occurrence of the CSL field. If the CDD or CCT is not available, a {US} separator character alone shall be used.

*[Unchanged text not included here for brevity]*

**DNAC 2.2018 DNA in CODIS Flag ~~(Future Capability)~~**

This ~~is a one-byte~~ field ~~that will~~ indicates whether the DNA available is located in the CODIS database for the subject identified on the CAR, CNA, and CPNU TOTs. The permissible values are 'Y' or 'N'.

**GEO 2.044 Geographic Area of Search**

This field indicates the geographic area to be searched. The appropriate two letter state/territory abbreviation shall be used as listed in ~~Part IV of the NCIC State and Country Data Code Table Appendix O~~. Each GEO entry shall be separated from the next by the {RS} separator character. Up to five state/territory selections can be made within the GEO field. If inclusion of all states and territories is desired, this field shall be omitted. When designating a specific state/territory within the GEO field, the search scope is limited to images previously submitted by the specified state or territory (i.e., individuals previously arrested in the designated location(s)). The GEO selection allows users to further narrow file penetration and may result in candidates being returned which would ordinarily be dropped due to low scores. Users are always encouraged to perform a second search with GEO omitted, if a GEO filtered search is not successful.

**NAM 2.018 Name**

This alphabetic and special character field contains the name(s) of the subject. The traditional encoding format shall be the surname followed by a comma, followed by the given names, which are separated by a space. ~~Part IV of the NCIC Code Manual Personal Descriptors within the NCIC Code Manual~~ describes in greater detail the manner in which each name is to be entered. Hyphens, commas, and spaces are allowed as special characters. Numerals are not allowed. Special values of NAM to be entered in cases where the subject's name is not known are:

~~**NAM1 2.2001 Name One (Future Capability)**~~

~~This alpha special character field represents the name of foremost importance when identifying a subject, such as a surname or family name, or an only name used in a single name culture. The maximum length of the NAM1 field is 50 characters.~~

~~**NAM2 2.2002 Name Two (Future Capability)**~~

~~This alpha special character field represents the name of second most importance when identifying a subject, such as given name. The maximum length of the NAM2 field is 50 characters.~~

~~**NAM3 2.2003 Name Three (Future Capability)**~~

~~This alpha special character field represents the name of third most importance when identifying a subject, such as "middle name," village, or tribal name. The maximum length of the NAM3 field is 50 characters.~~

~~**NAM4 2.2004 Name Four (Future Capability)**~~

~~This alpha special character field represents the name of fourth most importance when identifying a subject, such as a tribal or village name. The maximum length of the NAM4 field is 50 characters.~~

~~**NAM5 2.2005 Name Five (Future Capability)**~~

~~This alpha special character field represents the name of second most importance when identifying a subject, such as a tribal or village name. The maximum length of the NAM5 field is 50 characters.~~

**RBC 2.2065 Rap Back Category**

*[Unchanged text not included here for brevity]*

**Table 27 RBC Values Table**

| Rap Back Category  | Code     | Purpose Code |
|--|----------|--------------|
| <b>Firearms</b>  | <b>F</b> | <b>F</b>     |
| Volunteer, Child Care/School Employee, Non-Criminal Justice Employment and Licensing | I        | I            |
| Criminal Justice Employment  | J        | J            |
| Criminal Justice Investigative   | CI       | C            |
| Criminal Justice – Supervision   | CS       | C            |

|                                    |   |   |
|------------------------------------|---|---|
| Security Clearance Information Act | S | S |
|------------------------------------|---|---|

**RBMI 2.2039 Rap Back Maintenance Indicator**

*[Unchanged text not included here for brevity]*

**Table 28 RBMI Values Table**

| Code Value | Format Description   |
|------------|--|
| R          | Replace Rap Back Subscription data on file with that provided in the request       |
| D          | Delete Rap Back subscription data provided in request that matches what is on file |
| A          | Append Rap Back subscription data provided in request to that on file              |
| C          | Cancel the Rap Back subscription   |
| N          | Renew the Rap Back subscription ( <b>Currently not being used</b> )                |
| U          | Un-cancel a cancelled Rap Back subscription  |

**RBST 2.2071 Rap Back Subscription Term (Civil Subscriptions Only)**

~~This field is an optional field as there are currently no fees associated with Rap Back Services. If fees were to be reinstated this would then be used to indicate the Length of the Term of a Rap Back Subscription; during which time no additional fee will be charged for the Subscriber to validate their authority to subscribe to the individual and “extend” the subscription. Available Subscription Terms are 2, 5, or Lifetime. Values for this field must be chosen from the table below.~~

**Table 30 RBST Values Table – Currently Not Used**

| <del>RBST Code Value</del> | <del>Format Description</del>          |
|----------------------------|--|
| <del>2</del>               | <del>Two year subscription term</del>  |
| <del>5</del>               | <del>Five year subscription term</del> |
| <del>L</del>               | <del>Lifetime subscription term</del>  |

**RBTD 2.2049 Rap Back Term Date**

~~The date identifying the end of the two year or five year fee paid by the Rap Back Subscriber. It is added to the subscription by NGI based upon the Rap Back Subscription Term field value in the Rap Back Subscription Request. This date indicates when a new fee must be paid to continue the subscription. This date is separate from the Expiration Date and functions in relation to the Expiration Date as described in the most recent version of the NGI Program Rap Back Service Non-Criminal Justice Policy and Implementation Guide.~~

The Rap Back Subscription Term will not be used at this time, as there are currently no fees associated with Rap Back Services. The field remains available in case Rap Back fees are reinstated.

~~**SAN 2.099 State Arrest Number (Future Capability)**~~

~~This field contains a unique arrest number assigned by the state to a criminal subject. The SAN is an optional element that may assist in matching the submitted disposition data to the correct court cycle. If~~

~~present in the submission, this field should be returned in the response. Any printable 7-bit ASCII character with the exception of a period is acceptable. Embedded spaces are not permitted. SAN must not begin with a space.~~

Table C-1 Field Edit Specifications for Type-2 Elements

| Field Number | Identifier | Field Name                            | Character | Field Size<br>(not including<br>Character<br>Separators) |     | Occurrences                    |      | Example  | Comments/Special Characters                               |
|--------------|------------|---------------------------------------|-----------|--|-----|--------------------------------|------|--|---|
|              |            |                                       |           | Min  | Max | Min <sup>1</sup>               | Max  |  |   |
|              |            |                                       |           | 2.009  | OCA | ORIGINATING AGENCY CASE NUMBER | ANS  |  |   |
| 2.012        | LCN        | FBI LATENT CASE NUMBER                | ANS       | 11   | 11  |                                | 1    | 2.012:MX-12345678{GS}  | The only special character allowed is a hyphen.           |
| 2.2018       | DNAC       | DNA IN CODIS FLAG                     | A         | 1  | 1   |                                | 1    | 2.2018:N{GS}   |   |
| 2.2028       | BID        | BIOMETRIC IMAGE DESCRIPTION           | SET       |  |     |                                | 1000 |  |   |
| A            | SI         | SUBJECT IDENTIFIER                    | ANS       | 1  | 50  | 1                              | 1    | 2.2028:12AN43215689{US}1{US}123456{US}09{US}{US}{US}{GS}   | NCIC SMT codes only allow a space as a special character. |
| B            | IMT        | IMAGE TYPE                            | N         | 1  | 2   | 0                              | 1    |  |   |
| C            | BSI        | BIOMETRIC SET IDENTIFIER              | N         | 4  | 24  | 0                              | 1    |  |   |
| D            | FNR        | FINGER NUMBER REQUESTED               | N         | 2  | 2   | 0                              | 1    |  |   |
| E            | PPD        | PRINT POSITION DESCRIPTOR             | AN        | 5  | 5   | 0                              | 1    |  |   |
| F            | POS        | SUBJECT POSE                          | A         | 1  | 1   | 0                              | 1    |  |   |
| G            | SMT        | NCIC SMT CODE                         | AS        | 3  | 10  | 0                              | 1    |  |   |
| 2.2032       | ATR        | AUDIT TRAIL RECORD                    | SET       |  |     |                                | 100  |  |   |
| A            | ORI        | ORIGINATING AGENCY IDENTIFIER         | AN        | 9  | 9   | 1                              | 1    | 2.2032:NY0303000{US}20130514{US}SRL{US}1023456{US}1{US}06{US}{US}{US}{RS}NY0303000{US}20130518{US}SRB{US}3065432{US}9{US}{US}{US}F{US}{GS} | NCIC SMT codes only allow a space as a special character. |
| B            | DAT        | DATE OF DISSEMINATION                 | N         | 8  | 8   | 1                              | 1    |  |   |
| C            | TOT        | TOT OF DISSEMINATION                  | A         | 3  | 16  | 1                              | 1    |  |   |
| D            | BSI        | BIOMETRIC SET IDENTIFIER DISSEMINATED | N         | 4  | 24  | 0                              | 1    |  |   |
| E            | IMT        | IMAGE TYPE DISSEMINATED               | N         | 1  | 2   | 0                              | 1    |  |   |
| F            | FNR        | FRICITION RIDGE POSITION REQUESTED    | N         | 2  | 2   | 0                              | 1    |  |   |
| G            | PPD        | PRINT POSITION DESCRIPTION            | AN        | 5  | 5   | 0                              | 1    |  |   |
| H            | POS        | SUBJECT POSE                          | A         | 1  | 1   | 0                              | 1    |  |   |
| I            | SMT        | NCIC SMT CODE                         | AS        | 3  | 10  | 0                              | 1    |  |   |

<sup>1</sup> For shaded cells in the minimum occurrences column, please reference Tables D-1, E-1, and I-1 for field occurrences.

| Field Number | Identifier | Field Name                           | Character | Field Size<br>(not including<br>Character<br>Separators) |      | Occurrences                  |     | Example   | Comments/Special Characters  |
|--------------|------------|--------------------------------------|-----------|--|------|------------------------------|-----|---|--|
|              |            |                                      |           | Min  | Max  | Min <sup>1</sup>             | Max |   |  |
|              |            |                                      |           | 2.2033   | CNL  | CANDIDATE INVESTIGATIVE LIST | SET |   |  |
| A            | SI         | SUBJECT IDENTIFIER                   | ANS       | 1  | 50   | 1                            | 1   |   |  |
| B            | NAM        | MASTER NAME                          | AS        | 3  | 50   | 0                            | 1   | NAM allows commas, hyphens, and spaces as special characters.   |  |
| C            | BSI        | BIOMETRIC SET IDENTIFIER             | N         | 4  | 24   | 0                            | 1   |   |  |
| D            | IMT        | IMAGE TYPE                           | N         | 1  | 2    | 0                            | 1   |   |  |
| E            | FGP        | FRICITION RIDGE GENERALIZED POSITION | N         | 2  | 2    | 0                            | 1   |   |  |
| F            | PPD        | PRINT POSITION DESCRIPTOR            | AN        | 5  | 5    | 0                            | 1   | 2.2033:123456789{US}DOE,<br>JOHN{US}12345{US}9{US}{US}<br>{US}2000{US}25{US}1{US}01{U<br>S} {US}F{US}{GS} |  |
| G            | MSC        | MATCH SCORE                          | N         | 1  | 6    | 0                            | 1   |   |  |
| H            | BIA        | BIOMETRIC IMAGE AVAILABLE            | N         | 1  | 2    | 0                            | 1   |   |  |
| I            | NDR        | NAME OF DESIGNATED REPOSITORY        | NS        | 1  | 400  | 0                            | 1   | NDR value list, separated by comma.   |  |
| J            | IDC        | INFORMATION DESIGNATION CHARACTER    | N         | 2  | 2    | 0                            | 1   |   |  |
| K            | NOT        | NOTE FIELD                           | ANS       | 1  | 1000 | 0                            | 1   | Note Field allows aAny printable 7-bit ASCII character <del>is allowed</del> .                            |  |
| L            | POS        | SUBJECT POSE                         | A         | 1  | 1    | 0                            | 1   |   |  |
| M            | SMT        | NCIC SMT CODE                        | AS        | 3  | 10   | 0                            | 1   | NCIC SMT codes only allow a space as a special character.   |  |
| 2.2039       | RBMI       | RAP BACK MAINTENANCE INDICATOR       | A         | 1  | 1    |                              | 1   | 2.2039:R{GS}  | Acceptable values are R, D, A, C, and U. Value of N is currently not being used.                 |
| 2.2049       | RBTD       | RAP BACK TERM DATE                   | N         | 8  | 8    |                              | 1   | 2.2049:19940930{GS}   | This field is not being used as there are no fees associated with Rap Back Services at this time |

<sup>1</sup> For shaded cells in the minimum occurrences column, please reference Tables D-1, E-1, and I-1 for field occurrences.

| Field Number | Identifier | Field Name                | Character | Field Size<br>(not including<br>Character<br>Separators) |     | Occurrences                |     | Example   | Comments/Special Characters   |
|--------------|------------|---------------------------|-----------|--|-----|----------------------------|-----|---|---|
|              |            |                           |           | Min  | Max | Min <sup>1</sup>           | Max |   |   |
|              |            |                           |           | 2.2061   | BIE | BIOMETRIC IMAGE ENROLLMENT | SET |   |   |
| A            | BSI        | BIOMETRIC SET IDENTIFIER  | N         | 4  | 24  | 1                          | 1   |   |   |
| B            | IMT        | IMAGE TYPE                | N         | 1  | 2   | 1                          | 1   |   |   |
| C            | POS        | SUBJECT POSE              | A         | 1  | 1   | 0                          | 1   |   |   |
| D            | SMT        | SCARS, MARKS, AND TATTOOS | AS        | 3  | 10  | 0                          | 1   |   |   |
| 2.2072       | POC        | POINT OF CONTACT          | SET       |  |     |                            | 1   | 2.2072:Uncle Sam<br>Biometric Support<br>Center{US}304-555-<br>1212{GS} | SMT is populated when IMT=10. .<br>NCIC SMT codes only allow a space as<br>a special character. |
| A            | NAM        | NAME                      | AS        | 3  | 50  | 1                          | 1   |   |   |
| B            | PHONE      | PHONE NUMBER              | ANS       | 10   | 30  | 1                          | 1   |   |   |

<sup>1</sup> For shaded cells in the minimum occurrences column, please reference Tables D-1, E-1, and I-1 for field occurrences.

## Appendix D: Summary of Logical Record Layouts for Type-2 Identification and Verification Transactions

**Table D-1 Summary of Field Lists for Identification and Verification Transactions**

| Tag Element | SRE  |
|-------------|------|
| 2.2018 DNAC | 0..1 |

## Appendix I: Summary Of Logical Record Layouts For Type-2 Data Management Transactions

**Table I-1 Summary of Field Lists for Data Management Transactions**

| Tag Element | RBSCVL |
|-------------|--------|
| 2.2071 RBST | 0..1   |

## Appendix L: Summary Tables

**Table L-1 Complete Element Cross-Reference List by Tag Number**

| EBTS Tag Number | Element ID | Element Name                             |
|-----------------|------------|--|
| 1.016           | APS        | APPLICATION PROFILE SPECIFICATIONS       |
| 1.017           | ANM        | AGENCY NAMES                             |
| 2.012           | LCN        | FBI LATENT CASE NUMBER                   |
| 2.013           | LCX        | LATENT CASE NUMBER EXTENSION             |
| 2.094           | CCN        | COURT CASE NUMBER (FUTURE CAPABILITY)    |
| 2.099           | SAN        | STATE ARREST NUMBER (FUTURE CAPABILITY)  |
| 2.2001          | NAM1       | NAME ONE (Future Capability)             |
| 2.2002          | NAM2       | NAME TWO (Future Capability)             |
| 2.2003          | NAM3       | NAME THREE (Future Capability)           |
| 2.2004          | NAM4       | NAME FOUR (Future Capability)            |
| 2.2005          | NAM5       | NAME FIVE (Future Capability)            |
| 2.2018          | DNAC       | DNA IN CODIS FLAG (Future Capability)    |
| 4.001           | LEN        | LOGICAL RECORD LENGTH                    |
| 4.002           | IDC        | INFORMATION DESIGNATION CHARACTER        |
| 4.003           | IMP        | IMPRESSION TYPE                          |
| 4.004           | FGP        | FRICTION RIDGE GENERALIZED POSITION      |
| 4.005           | ISR        | IMAGE SCANNING RESOLUTION                |
| 4.006           | HLL        | HORIZONTAL LINE LENGTH                   |
| 4.007           | VLL        | VERTICAL LINE LENGTH                     |
| 4.008           | GCA        | COMPRESSION ALGORITHM                    |
| 4.009           | IMG        | IMAGE DATA                               |
| 9.180 - 9.225   | RSV UDF    | OTHER FEATURE SETS - USER-DEFINED FIELDS |

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|        |      |  |
|--------|------|--|
| 9.363  | RRC  | EFS RELATIVE ROTATION OF CORRESPONDING PRINT |
| 9.372  | EFS  | EFS SKELETONIZED IMAGE                       |
| 9.901  | ULA  | UNIVERSAL LATENT ANNOTATION                  |
| 9.902  | ANN  | ANNOTATION INFORMATION                       |
| 9.903  | DUI  | DEVICE UNIQUE IDENTIFIER                     |
| 9.904  | MMS  | MAKE/MODEL/SERIAL NUMBER                     |
| 10.993 | SAN  | SOURCE AGENCY NAME                           |
| 13.993 | SAN  | SOURCE AGENCY NAME                           |
| 14.025 | ASEG | ALTERNATE FINGER SEGMENT POSITION(S)         |
| 14.026 | SCF  | SIMULTANEOUS CAPTURE                         |
| 14.027 | SIF  | STITCHED IMAGE FLAG                          |
| 15.018 | AMP  | AMPUTATED OR BANDAGED                        |
| 15.993 | SAN  | SOURCE AGENCY NAME                           |

**Appendix M: Transaction Messages**

**Table M-1 Transaction Messages**

| Code  | Condition for Message                         | Description   | Count | Insert #1 | Insert #2 | Insert #3 |
|-------|---|---|-------|-----------|-----------|-----------|
| L0032 | Duplicate DOA and DOS                         | Cannot update subject record because DOA %1 and corresponding DOS already exist. Refer to FBI Number %2.          | 2     | DOA       | UCN       |           |
| L0042 | No Matching Court Data                        | Cannot update this event – no data can be deleted when no matching court data is found.                           | 0     |           |           |           |
| L0176 | Record No Longer on File - Expunged           | Pointer for submitting state has been expunged  | 0     |           |           |           |
| L0181 | Document Reject - Other                       | Document Rejected. See %1 %2 %3   | 0-3   | Free Text | Free Text | Free Text |
| L0182 | Menard vs Saxbe Expungement                   | Event specified for update has been expunged per Menard vs Saxbe criteria   | 0     |           |           |           |
| M0056 | Facial Photo – Modified multiple subjects     | The Photo Facial Biometric %1 for UCN %2 included multiple subjects and has been modified to include one subject. | 2     | BSI       | UCN       |           |
| M0057 | Facial Photo – Multiple subjects not enrolled | The Photo Facial Biometric for UCN %1 included multiple face/images and has not been enrolled.                    | 1     | UCN       |           |           |

**Appendix N: Descriptors And Field Edit Specifications For Type-14 Logical Records**

**ASEG 14.025 Alternate Finger Segment Position(s)**

This optional field is an alternate approach to describing the locations for each of the image segments of

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each of the individual fingers within a flat image containing the capture of four (or more if extra digits exist on the hand) simultaneous fingers or two simultaneous thumbs. Where SEG, 14.021, uses a straight box for this segmentation, ASEG allows for more of a polygon shape of segmentation. For submitting this field for NGI/CJIS, the user must include exactly 4 vertices of the polygon in sequential order with the first vertex being of the upper left point and continuing in a clockwise manner. The vertices must be within the bounds of the flat image and no two vertices may occupy the same location. The polygon shall be a four-cornered shape with no sides crossing.

### Appendix O: Place Of Birth (POB) Code Table

Appendix O contains the codes for Place of Birth (POB 2.020), Citizenship (CTZ 2.021) and Geographic Area of Search (GEO 2.044) fields. **These codes are taken from the State and Country Data Codes within the NCIC Code Manual.** The ‘CTZ’ contains an asterisk (\*) for those codes that are valid for usage in the CTZ 2.021 field. All codes are valid for usage in the POB 2.020 field and the GEO 2.044 field. The “DATE AHEAD FLAG” indicates those codes where the local date may be a day ahead of North American time zones.

### Appendix AC: ACRONYMS

| Acronym       | Description   |
|---------------|---|
| <b>BDB</b>    | <b>Biometric Data Block</b>   |
| <b>BDQ</b>    | <b>Biometric Data Quality</b>                                       |
| <b>BFO</b>    | <b>BDB Format Owner</b>   |
| <b>BFT</b>    | <b>BDB Format Type</b>  |
| <b>BIR</b>    | <b>Biometric Information Record</b>                                 |
| <b>BTY</b>    | <b>Biometric Type</b>   |
| <b>CBEFF</b>  | <b>Common Biometric Exchange File Format</b>                        |
| <b>CCN</b>    | <b>Court Case Number</b>  |
| <b>CI</b>     | <b>Criminal File Justice Investigative</b>                          |
| <b>CR</b>     | <b>Criminal File</b>  |
| <b>CSN</b>    | <b>Candidate Sequence Number</b>                                    |
| <b>ECL</b>    | <b>Eye Color</b>  |
| <b>EFTS</b>   | <b>Electronic Fingerprint Transmission Specification</b>            |
| <b>FID</b>    | <b>Feature Identifier</b>   |
| <b>FIDR</b>   | <b>Foreign Information Direct Route</b>                             |
| <b>GUI</b>    | <b>Global Unique Identifier</b>                                     |
| <b>HDV</b>    | <b>CBEFF Header Version</b>   |
| <b>IBIA</b>   | <b>International Biometrics Industry Association</b>                |
| <b>ICN</b>    | <b>IAFIS Control Number</b>   |
| <b>IdHS</b>   | <b>Identity History Summary</b>                                     |
| <b>INCITS</b> | <b>International Committee for Information Technology Standards</b> |
| <b>IPC</b>    | <b>Image Property Code</b>  |
| <b>IQM</b>    | <b>Image Quality Metric</b>   |
| <b>IQS</b>    | <b>Image Quality Score Specification</b>                            |
| <b>LPU</b>    | <b>Latent Print Unit</b>  |
| <b>MDD</b>    | <b>Message Data Dictionary</b>                                      |
| <b>MFC</b>    | <b>Message Field Code</b>   |

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|          |   |
|----------|---|
| MFD      | Method of Feature Detection                       |
| MNC      | Maximum Number of Candidates                      |
| MPS      | Major Case Print Segment                          |
| MTD      | Minutiae Type Designation                         |
| N-FACS   | National Fingerprint Based Applicant Check Study  |
| NFIQ     | NIST Fingerprint Image Quality                    |
| NRC      | Number of Required Candidates                     |
| OFR      | Originating Fingerprint Reading System            |
| PAX      | Photo Acquisition Source                          |
| PNG      | Portable Network Graphics                         |
| PPE      | Palm Print Enrollment Request                     |
| PPR      | Palm Print Enrollment Response                    |
| RAE      | Rotation Angle of Eye                             |
| RAU      | Rotation Uncertainty                              |
| RFC      | Request for Change                                |
| RMS      | Root Mean Squared                                 |
| SAN      | State Arrest Number                               |
| SFP      | Subject Feature Points                            |
| SOR      | Source Representation                             |
| SOR      | <del>Want or</del> Sexual Offender Registry       |
| TBD      | To Be Determined                                  |
| TBR      | To Be Resolved                                    |
| TCD      | Tenprint Capture Date                             |
| UDI      | User Defined Image                                |
| UK       | United Kingdom                                    |
| US-VISIT | Visitor and Immigrant Status Indicator Technology |
| UTD      | User Defined Testing Date                         |
| V        | Version   |

**Section 3 – Aggregate List of Changes**

This section records the changes made for EBTS TOU 1 through TOU 9. The implementation dates for each TOU are as follows:

| <b>TOU</b> | <b>Date</b> |
|------------|-------------|
| 10.0.1     | 2/5/14      |
| 10.0.2     | 6/2/14      |
| 10.0.3     | 9/30/14     |
| 10.0.4     | 3/13/15     |
| 10.0.5     | 6/13/15     |
| 10.0.6     | 6/20/16     |
| 10.0.7     | 12/5/16     |
| 10.0.8     | 9/30/17     |
| 10.0.9     | 5/22/18     |

| <b>Section</b>                         | <b>TOU Number</b> | <b>Change</b>  |
|--|-------------------|--|
| 1.1                                    | 10.0.8            | Updated Background   |
| 1.2                                    | 10.0.9            | Added wording about ASCII characters                                 |
| 1.4                                    | 10.0.9            | Added paragraph about EBTS Compliance Tool Suite                     |
| 1.8                                    | 10.0.4            | Added new compression references                                     |
|  | 10.0.7            | Added new reference  |
|  | 10.0.8            | Updated link for ANSI/NIST-ITL reference                             |
|  | 10.0.9            | Added Rap Back reference   |
| 2                                      | 10.0.8            | Updated second paragraph   |
| 3.1.1                                  | 10.0.9            | Removed MAPC TOT from EBTS   |
| 3.1.1.15 MAPC                          | 10.0.9            | Removed MAPC TOT from EBTS   |
| 3.1.1.6 EMUF                           | 10.0.1            | Updated second paragraph   |
| 3.1.1.9 FIDR                           | 10.0.1            | Updated first paragraph  |
| 3.1.1.19 Rap Back Subscription Request | 10.0.9            | Updated first paragraph  |
| 3.1.1.21 SRE                           | 10.0.8            | Updated first paragraph  |
| 3.1.1.22 ERRT                          | 10.0.8            | Added new section (Future Capability)                                |
| 3.1.2.1 LFS                            | 10.0.8            | Updated LFS header   |
| 3.1.3.1 RPIS                           | 10.0.1            | Updated second paragraph   |
| 3.1.3.2 RPISR                          | 10.0.8            | Updated RPISR description  |
| 3.1.4                                  | 10.0.7            | Corrected ERRT name  |
| 3.2.2 SRE                              | 10.0.7            | Corrected Table 3 reference in text                                  |
| 3.3.1                                  | 10.0.5            | Updated Response TOT list for CPR                                    |
| 3.3.1.1 IRQ                            | 10.0.1            | Updated first paragraph<br>Added paragraph after the first paragraph |

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| Section         | TOU Number | Change   |
|-----------------|------------|--|
|                 | 10.0.5     | Updated third paragraph  |
|                 | 10.0.7     | Corrected name for ERRI in third paragraph   |
|                 | 10.0.8     | Updated fourth paragraph   |
| 3.3.1.3 IRR     | 10.0.1     | Updated first paragraph  |
| 3.3.1.4 ISR     | 10.0.1     | Updated first paragraph  |
| 3.3.2           | 10.0.3     | Updated Response Transaction list  |
| 3.3.2.1 BATQ    | 10.0.3     | Updated section  |
| 3.3.2.2 BATR    | 10.0.3     | Updated section title  |
| 3.4.2           | 10.0.5     | Updated third paragraph  |
|                 | 10.0.7     | Added "CMF Search?" to "ULF Flag Set?" Decision point in Search row in Figure 6                      |
| 3.4.3           | 10.0.7     | Corrected ERRA transaction name  |
| 3.4.4.2 TXTSRCH | 10.0.1     | Updated first paragraph<br>Added second and third paragraphs, describing TOT use                     |
|                 | 10.0.9     | Updated first paragraph  |
| 3.4.4.3 FRS     | 10.0.5     | Updated first paragraph  |
|                 | 10.0.6     | Added text to end of first paragraph   |
| 3.4.4.4 SRB     | 10.0.1     | Replaced second paragraph  |
| 3.4.5.1 IIIS    | 10.0.4     | Updated sentence   |
| 3.4.6           | 10.0.3     | Reordered sections to conform with Response Transaction list<br>Corrected TOT name for EQHR and EQRR |
| 3.4.6.3 EQER    | 10.0.3     | Restored EQER section  |
| 3.4.6.4 EQRR    | 10.0.5     | Updated first paragraph  |
| 3.4.6.5 ERRR    | 10.0.5     | Updated first paragraph and added second paragraph   |
|                 | 10.0.7     | Updated first paragraph  |
| 3.5             | 10.0.7     | Updated first paragraph  |
| 3.5.1 SPN       | 10.0.1     | Updated first paragraph  |
| 3.5.3 RBRN      | 10.0.9     | Updated RBRN description   |
| 3.5.6 ULM       | 10.0.1     | Updated second paragraph   |
|                 | 10.0.5     | Updated third paragraph  |
| 3.6.3 BDEC      | 10.0.2     | Updated section  |
|                 | 10.0.3     | Updated second paragraph   |
| 3.6.5 BDEL      | 10.0.1     | Updated third paragraph  |
| 3.6.11 DSPE     | 10.0.9     | Updated DSPE title and paragraph   |

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| Section       | TOU Number | Change   |
|---------------|------------|--|
| 3.6.12 DSPR   | 10.0.9     | Updated DSPR description   |
| 3.6.13 FIS    | 10.0.6     | Updated first paragraph  |
|               | 10.0.8     | Updated first paragraph  |
| 3.6.14 FISR   | 10.0.1     | Updated first paragraph  |
|               | 10.0.6     | Updated first paragraph  |
| 3.6.15 SPMNT  | 10.0.1     | Updated second paragraph   |
| 3.6.20 RBSCVL | 10.0.9     | Updated RBSCVL description   |
|               | 10.0.9     | Removed Rap Back Code value “F” from Rap Back Civil Category Code Values Table   |
| 3.6.22 RBMNT  | 10.0.9     | Updated RBMNT Section Title and third paragraph  |
|               | 10.0.9     | Updated Rap Back Replace & Renew descriptions  |
| 3.6.23 RBMNTR | 10.0.3     | Updated first paragraph  |
| 3.8.2         | 10.0.4     | Updated first and second paragraph   |
| 3.8.4         | 10.0.9     | Corrected plain thumb sizes in Recommended Sizes for Fingerprint Table   |
| Appendix A    | 10.0.3     | Restored Friction Ridge Investigation Search – Latent rows   |
|               | 10.0.4     | Updated Table A-1  |
|               | 10.0.9     | Removed second paragraph   |
|               |            | Removed MAPC from Table A-2  |
| Appendix B    | 10.0.1     | Added 1.011 NSR  |
|               | 10.0.3     | Updated 1.013 DOM  |
|               | 10.0.7     | Corrected description for 1.012 NTR  |
| Appendix C    | 10.0.1     | Relabeled column headings and table name, also reversed columns for Table 11 BID Values Table<br>Updated 2.014 FBI Data Dictionary definition<br>Updated 2.037 RFP Data Dictionary definition<br>Updated 2.079 NCR Data Dictionary definition<br>Updated 2.084 AMP Data Dictionary code table<br>Updated 2.2010 NIR Data Dictionary definition<br>Updated 2.2032C TOT of Dissemination for Max Length<br>2.2058 SMD spelling correction in SMI Values Table<br>Updated 2.2069B RBT for Min Occurrences<br>Updated 2.2069C RBEI for Min Occurrences |
|               | 10.0.2     | Updated 2.019 AKA Data Dictionary definition<br>Updated 2.038 DPR Data Dictionary definition<br>Added 2.046 DOS to Data Dictionary<br>Added 2.046 DOS to Table C-1<br>Updated 2.088 NOT Data Dictionary definition<br>Updated the data type for fields 2.2028G SMT, 2.2032I SMT, 2.2033M SMT and 2.2061D SMT   |

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| Section | TOU Number | Change  |
|---------|------------|---|
|         | 10.0.3     | Updated 2.098 NDR Values Table<br>Updated 2.2020 RBSL   |
|         | 10.0.4     | Updated section 1.1<br>Updated 2.051 CSL definition<br>Updated 2.2063 RBOO definition   |
|         | 10.0.5     | Updated 2.083 ULF name and definition<br>Updated Table C-1 for 2.2064A RBFN and 2.2064B RBFT<br>Updated Table C-1 for 2.071 ACN Example<br>Updated Table C-1 for 2.083 ULF  |
|         | 10.0.6     | Updated 2.046 DOS definition<br>Corrected IDENT description in Table 23: NDR Values Table   |
|         | 10.0.7     | Updated Table 17 IFS Values Table   |
|         | 10.0.8     | Updated descriptions for 2.071 ACN, 2.019 AKA, 2.084 AMP, 2.047 ASL, 2.2031 BIA, 2.2073 BIL, 2.064 CAN, 2.094 CCN, 2.051 CSL, 2.056 ICO, 2.017 MNU, 2.018 NAM, 2.009 OCA, 2.037 RFP, 2.099 SAN, 2.2007 SDOB, 2.015 SID, 2.055 SLE, 2.2008 SNAM, and SMT (2.026, 2.2028G, 2.2032I, 2.2033M, 2.2061D)<br>Updated comments for 2.015 SID, 2.018 NAM, 2.019 AKA, 2.026 SMT, 2.037 RFP, 2.055 SLE, 2.064 CAN, and 2.2008 SNAM in Table C-1<br>Updated maximum occurrence for 2.047 ASL and 2.051 CSL in Table C-1<br>Updated special characters for 2.071 ACN in Table C-1   |
|         | 10.0.9     | Updated Section 1.0 to clarify allowed ASCII characters<br>Added footnote to Table C-1<br>Edited descriptions for 2.064 CAN, 2.051 CSL, 2.044 GEO, and 2.018 NAM<br>Removed 2.094 CCN and 2.099 SAN from EBTS<br>Removed 2.2001 NAM1, 2.2002 NAM2, 2.2003 NAM3, 2.2004 NAM4, and 2.2005 NAM5 from EBTS<br>Removed Future Capability reference for 2.2018 DNAC and updated description<br>Removed Rap Back Code value “F” from RBC Values Table<br>Updated Rap Back Code “N” in RBMI Values Table<br>Updated 2.2071 RBST description and values<br>Updated description for 2.2049 RBTD<br>Clarified special characters in Table C-1 for 2.009 OCA, 2.012 LCN, 2.2028G SMT, 2.2032I SMT, 2.2033 CNL, 2.2061D SMT, and 2.2072A NAM<br>Added 2.2018 DNAC to Table C-1<br>Updated Comments/Special Characters in Table C-1 for 2.2039 RBMI and 2.2049 RBTD |

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| Section    | TOU Number | Change  |
|------------|------------|---|
| Appendix D | 10.0.1     | Updated 2.017 MNU for FDSP<br>Updated 2.084 AMP for AMN, CAR, CNA, CPDR, CPNU, DEK, DEU, DOCE, EMUF, FANC, FAUF, FDSP, FIDR, FNDR, FVR, MAP, MPR, NFUE, NFUF, NNDR, and RPIS<br>Added 2.098 NDR to FIDR   |
|            | 10.0.2     | Removed 2.096 RPR, 2.098 NDR, 2.2037 ESI from DOCE<br>Removed 2.096 RPR, 2.098 NDR, 2.2015 RBXD, 2.2020 RBR, 2.2037 ESI, 2.2040 RBT, 2.2062 RBNF, 2.2063 RBOO, 2.2064 RBUD, 2.2065 RBC, 2.2067 RBDI, 2.2070 RBATN, 2.2071 RBST from EMUF<br>Removed 2.2007 SDOB and 2.2008 SNAM from ERRT<br>Updated section introduction   |
|            | 10.0.6     | Added field 2.046 DOS to CPNU and FIDR  |
|            | 10.0.7     | Removed 0..1 occurrence for field 2.2067 RBDI for FANC, FAUF, FNDR, MAP, NFUE, NFUF, and NNDR<br>Removed 0..1 occurrence of field 2.2071 RBST for CAR, CPDR, and CPNU   |
|            | 10.0.8     | Updated occurrence for 2.047 ASL for CAR, CNA, CPDR, CPNU, and LFS<br>Updated occurrence for 2.051 CSL for CAR, CNA, CPDR, CPNU, and FDSP<br>Updated occurrence for 2.2007 SDOB for ERRT (Future Capability)<br>Updated occurrence for 2.2008 SNAM for ERRT (Future Capability)<br>Added superscript for 2.051 CSL occurrence for FDSP<br>Added new reference notes in Appendix D – Reference Notes   |
|            | 10.0.9     | Added 2.2018 DNAC to SRE in Table D-1   |
| Appendix E | 10.0.1     | Updated 2.014 FBI for IRR<br>Updated 2.018 NAM for EQHR and EQRR<br>Updated 2.021 CTZ for EQHR<br>Updated 2.037 RFP from UULD<br>Updated 2.073 CRI for EHRR, EQER, EQHR, EQRR and ERRR<br>Updated 2.075 ERS for RBN<br>Updated 2.084 AMP for SRT<br>Updated 2.084 AMP for TPIS and TPRS<br>Updated 2.098 NDR for ISR<br>Updated 2.2033 CNL for SRB<br>Updated 2.026 SMT for TXTSRCH<br>Updated 2.2058 SMD for TXTSRCH<br>Updated 2.2059 TCL for TXTSRCH |
|            | 10.0.2     | Added 2.046 DOS to CPR and PRR<br>Removed 2.079 NCR from TPRR<br>Updated section introduction   |
|            | 10.0.6     | Updated 2.073 CRI for FRS   |
|            | 10.0.8     | Added 2.060 MSG occurrence for RBRPTR   |

SECTION 3 – EBTS FUNCTIONAL CHANGES

| Section    | TOU Number | Change  |
|------------|------------|---|
| Appendix F | 10.0.1     | Updated section 4.10.4 Requirement  |
|            | 10.0.4     | Update note under Table F-5<br>Update web site reference under Table F-5  |
|            | 10.0.6     | Updated Table F-2 for minimum modulation for 500 ppi scanner to<br>2 cy/mm  |
|            | 10.0.7     | Added text in Section 4.10.6 that points to new reference<br>Updated FAP 50 platen size in Table F-5<br>Added new document in References<br>Updated Mobile ID version in References   |
|            | 10.0.8     | Added new sections 2.7 and 4.11<br>Updated Image Quality for Mobile ID  |
| Appendix H | 10.0.7     | Corrected sentence in second paragraph  |
| Appendix I | 10.0.1     | Removed 2.006 ATN from XACT and XACTR<br>Updated 2.014 FBI for PDR<br>Removed 2.055 SLE from SRNR<br>Added 2.073 CRI, 2.2100 SED, 2.2101 SST, 2.2102 RSC, 2.2103 STT, and 2.2104 SRA to SRNR<br>Added 2.073 CRI and 2.075 ERS to SRNR<br>Updated 2.084 AMP for FIS<br>Updated 2.2035 EVI for DSPR |
|            | 10.0.2     | Added 2.046 DOS to PDR and CPD<br>Updated section introduction  |
|            | 10.0.8     | Updated occurrence for 2.047 ASL for SRNR<br>Updated occurrence for 2.051 CSL for DSPE and SRNR<br>Added superscript for 2.051 CSL occurrence for DSPE<br>Added new footnote to Table I-1   |
|            | 10.0.9     | Updated 2.2071 RBST for RBSCVL in Table I-1   |
| Appendix J | 10.0.1     | Updated table heading for Table 45<br>Updated Table 46<br>Update table heading for Table 47   |
| Appendix K | 10.0.1     | Added sentence to end of section  |
| Appendix L | 10.0.1     | Updated FIS for T17<br>Updated FIDR for T4 and T14<br>Updated IRR for T9 and T14<br>Updated IRQ Response TOTs   |
|            | 10.0.2     | Added 2.046 DOS to Table L-1  |
|            | 10.0.4     | Corrected transaction name for EHRR<br>Updated IIDS for T10 and T17<br>Updated IRR for T17<br>Updated SRB for T17   |
|            | 10.0.5     | Updated Table L-1 for 2.083 ULF<br>Updated Table L-4 for CPR  |

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| Section     | TOU Number | Change  |
|-------------|------------|---|
|             | 10.0.7     | Added ERRB to Table L-3   |
|             | 10.0.8     | Added 14.018 AMP to Table L-1<br>Updated footnote for Table L-3   |
|             | 10.0.9     | Removed Future Capability reference for 2.2018 DNAC in Table L-1<br>Added missing fields to Table L-1<br>Removed 2.094 CCN and 2.099 SAN from Table L-1<br>Removed 2.2001 NAM1, 2.2002 NAM2, 2.2003 NAM3, 2.2004 NAM4, and 2.2005 NAM5 from Table L-1 |
| Appendix M  | 10.0.1     | Updated messages in Table M-1 based on Operational needs<br>Added Error Class Key to Table M-1  |
|             | 10.0.2     | Added A0015 to Message Table<br>Added L0031 to Message Table<br>Added M0033 to Message Table<br>Added M0051 to Message Table<br>Added M0052 to Message Table  |
|             | 10.0.3     | Added footnote  |
|             | 10.0.4     | Added L0174 and L0179 to Message Table  |
|             | 10.0.7     | Removed L0174 code from Table M-1<br>Added error message codes RB030 and RB031 to Table M-1   |
|             | 10.0.8     | Updated error message code RB019<br>Added error message code RB029<br>Updated error message code L0154<br>Added error message code M0055  |
|             | 10.0.9     | Added error message code L0032<br>Added new error message codes L0042, L0176, L0181, L0182, M0056, and M0057  |
|             |            |   |
| Appendix N  | 10.0.2     | Updated 14.015 PPC Data Dictionary definition   |
|             | 10.0.8     | Added fourth paragraph to introduction  |
|             | 10.0.9     | Added field 14.025 ASEG to Appendix N   |
| Appendix O  | 10.0.1     | Corrected appendix introduction   |
|             | 10.0.4     | Updated appendix introduction   |
|             | 10.0.6     | Corrected CTZ value for four codes in POB Code Table<br>Corrected FR code description   |
|             | 10.0.7     | Added South Sudan to Table O-1  |
|             | 10.0.9     | Updated first paragraph   |
| Appendix P  | 10.0.4     | Updated section introduction text, sixth paragraph<br>Updated web address for Palm Print Capture Guide<br>Added note to Table P-2 Friction Ridge  |
| Appendix AC | 10.0.4     | Removed acronyms IID, IIE, IIER, IIR and IRD<br>Corrected EHRR  |
|             | 10.0.5     | Updated acronym ULF   |
|             | 10.0.6     | Corrected description for IIIS  |

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| Section | TOU Number | Change  |
|---------|------------|---|
|         | 10.0.7     | Added acronym CMF<br>Corrected DSPR Description<br>Corrected EHRR Description<br>Added ERRR<br>Added acronym IFS<br>Corrected IRR Description   |
|         | 10.0.8     | Added acronym AFV<br>Added acronym AUD<br>Added acronym CCA<br>Added acronym DOB<br>Added acronym DoD<br>Added acronym DOD<br>Added acronym ESI<br>Added acronym FSI<br>Added acronym ICO<br>Added acronym LESC<br>Updated acronym LFS<br>Added acronym MOU<br>Added acronym NFS<br>Added acronym NGI<br>Added acronym QC<br>Added acronym SCH<br>Added acronym TP<br>Added acronym TPTP<br>Added acronym WAN |
|         | 10.0.9     | Updated acronyms in Appendix AC   |